

CLAIMS

WE CLAIM AS OUR INVENTION:

1. An interconnecting assembly for a rotor assembly of a dynamoelectric
5 machine, said interconnecting assembly being part of a conductive path generally
extending from a radially inward section of the rotor assembly to a winding located at a
radially outward section of the rotor assembly, the interconnecting assembly
comprising:
a flexible member comprising a bend; and
10 a connector connected to the flexible member to pass axial and radial forces
that develop during operation of the machine, the positioning of the connector relative to
the flexible member being arranged so that an effect of an axial force on a radius of
curvature of the bend and an effect of a radial force on said radius of curvature are
opposed to one another.
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2. The interconnecting assembly of claim 1 wherein said axial force tends to
close the bend, and said radial force tends to open the bend.
3. The interconnecting assembly of claim 1 wherein said bend defines a
20 mouth facing radially inwards.
4. The interconnecting assembly of claim 1 wherein said flexible member
comprises a plurality of conductive leaves.
- 25 5. The interconnecting assembly of claim 4 further comprising a gap
between adjacent leaves in said bend.
6. The interconnecting assembly of claim 1 wherein said flexible member
comprises a first leg connected to a radial lead and extending along an axial direction.

7. The interconnecting assembly of claim 6 wherein said flexible member further comprises a second leg connected to the first leg through a curved section.

8. The interconnecting assembly of claim 7 wherein said second leg extends
5 at an angle ranging from about two to about five degrees relative to a radial direction.

9. The interconnecting assembly of claim 7 wherein said flexible member further comprises a third leg connected to the second leg through said bend.

10. The interconnecting assembly of claim 9 wherein said third leg extends at
10 an angle ranging from about two to about five degrees relative to the radial direction.

11. The interconnecting assembly of claim 9 wherein said third leg includes an
appendage comprising a connector interface section, said appendage extending at a
15 different angle with respect to the radial direction than a remainder of the third leg.

12. A dynamoelectric machine comprising a winding located at a radially
outward section of a rotor assembly, said machine comprising:

a conductive path generally extending from a radially inward section of the rotor
20 assembly to said winding, said conductive path comprising a flexible member
comprising a bend and connected between said radially inward section of the rotor
assembly and the winding, said flexible member oriented so that said bend exhibits a
first effect in response to an axial force and a second effect in response to a radial
force during operation of said machine, said first and second effects being opposed to
25 one another.

13. The dynamoelectric machine of claim 12 wherein said axial force tends to
close the bend, and said radial force tends to open the bend.

14. The dynamoelectric machine of claim 12 wherein said bend defines a
30 mouth facing radially inwards.

15. The dynamoelectric machine of claim 12 wherein said flexible member comprises a plurality of conductive leaves.

16. The dynamoelectric machine of claim 15 further comprising a gap
5 between adjacent leaves in said bend.

17. The dynamoelectric machine of claim 12 wherein said flexible member comprises a first leg connected to a radial lead and extending along an axial direction.

10 18. The dynamoelectric machine of claim 17 wherein said flexible member further comprises a second leg connected to the first leg through a curved section.

15 19. The dynamoelectric machine of claim 18 wherein said second leg extends at an angle ranging from about two to about five degrees relative to a radial direction.

20. The dynamoelectric machine of claim 18 wherein said flexible member further comprises a third leg connected to the second leg through said bend.

20 21. The dynamoelectric machine of claim 20 wherein said third leg extends at an angle ranging from about two to about five degrees relative to the radial direction.

22. The dynamoelectric machine of claim 20 wherein said third leg includes an appendage comprising a connector interface section, said appendage extending at a different angle with respect to the radial direction than a remainder of the third leg.